13. COMMENTS OUTSIDE THE SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT AND THE YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

13 (5)

Comment - 213 comments summarized

Commenters expressed their opinions regarding the need for and use of nuclear power. Most were opposed. Many of the commenters stated that there would be no nuclear waste problem if there were no nuclear power. Others stated that nuclear power is uneconomical and unsafe. Commenters stated that a moratorium on the mining of uranium, the construction of new powerplants, weapons facilities, and nuclear testing areas should be enacted immediately and advocated energy conservation; the use of alternative energy technologies, primarily from renewable sources such as geothermal, solar, wind, hydrogen, biomass, and hydropower; and DOE's financial support and promotion of education, research, and implementation in these areas. The use of clean coal technology was also recommended.

A small number of commenters supported the use of nuclear power; some cited economic benefits, including jobs, or stated that nuclear powerplants do not emit greenhouse gases and other conventional air pollutants that are emitted from fossil-fueled power plants.

Response

The United States depends on nuclear power as an energy source to produce electricity. At present, approximately 20 percent of the electricity in the United States is generated by nuclear power. In accordance with the Atomic Energy Act, the Nuclear Regulatory Commission is responsible for licensing, regulating, and overseeing commercial nuclear powerplants, including the generation and interim storage of spent nuclear fuel at the reactor sites. Therefore, the Commission, not DOE, has authority over the Nation's nuclear power industry.

The National Energy Policy envisions a comprehensive long-term strategy that uses leading-edge technology to produce an integrated energy, environmental, and economic policy (DIRS 156756-Cheney 2001).

DOE is committed to the development and responsible use of all types of energy, and supports energy education and conservation activities. DOE actively promotes these efforts through its many outreach programs. The DOE Office of Energy Efficiency and Renewable Energy is leading the Nation's efforts in the study of alternative energy technologies, including geothermal, wind, solar, hydrogen, biomass, and hydropower. For information on the Office's activities, please visit its web site at http://www.eren.doe.gov or write to U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, 1000 Independence Ave., S.W., Washington, DC, 28585.

13 (35)

Comment - 11 comments summarized

DOE received comments on the reprocessing of spent nuclear fuel—both in favor of and opposed to reprocessing. Reprocessing is the chemical separation of spent reactor fuel into uranium, transuranic elements, and fission products. One commenter stated that the United States Government should reconsider the policy that deferred indefinite recycling of commercial spent nuclear fuel and noted that other countries such as France and the United Kingdom currently reprocess fuel. Others in support of reprocessing stated that the material to be emplaced at Yucca Mountain is not waste but rather yet-to-be-recycled fuel. Other commenters opposed to reprocessing stated that a firm commitment should be made against the reprocessing of irradiated/spent nuclear fuel and others stated that reprocessing adds to radiological contamination.

Response

The scope of this EIS is limited to an analysis of the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, and the No-Action Alternative.

At present, commercial spent nuclear fuel is not reprocessed in the United States . While materials disposed of in the proposed repository could have the potential to be an economic resource, it has been a long-standing policy of the United States to promote international nonproliferation efforts by not reprocessing nuclear material. The Carter

Administration cancelled the breeder reactor commercialization and plutonium recycle programs in this country on April 7, 1977.

In 1993, President Clinton reemphasized the U.S. policy, stressing the need to avoid increasing the accumulation of material that has the potential for use in nuclear weapons.

The policy further states that the United States does not encourage the use of civilian plutonium and, accordingly, does not engage in plutonium reprocessing for either nuclear power or nuclear explosive purposes.

13 (37)

Comment - 18 comments summarized

DOE received comments about activities involving DOE and commercial nuclear sites around the United States, conditions in the environments around those sites, potential health effects from activities or conditions at those sites, and other governmental activities not related to the proposed geologic repository at Yucca Mountain.

Response

This EIS analyzes the potential environmental impacts of constructing, operating and monitoring, and eventually closing a geologic repository at Yucca Mountain for the disposal of spent nuclear fuel and high-level radioactive waste, and the No-Action Alternative. The EIS also analyzes the potential impacts of transporting spent nuclear fuel and high-level radioactive waste to Yucca Mountain from 72 commercial and 5 DOE sites across the United States. Activities or conditions at other DOE or commercial nuclear sites, or that are within the purview of other governmental organizations, are outside the scope of this EIS. Comments and questions are of great concern to DOE and should be directed to the governmental organizations or corporations having authority over those projects or activities.

13 (72)

Comment - 12 comments summarized

DOE received comments opposed to the interim storage of spent nuclear fuel on Native American lands in the Western United States, in particular, the Private Fuel Storage Facility proposed for Skull Valley, Utah.

Response

Private Fuel Storage, L.L.C., which is owned by eight U.S. nuclear power generating utilities, has applied to the Nuclear Regulatory Commission for a license to receive, transfer, and possess spent nuclear fuel from commercial nuclear reactors at a privately owned spent nuclear fuel storage installation on the Reservation of the Skull Valley Band of Goshute Indians near Tooele, Utah. This facility would store spent nuclear fuel pending the availability of a DOE facility to accept the material permanently. The Commission is the lead agency for preparing the EIS for this proposed facility, and the Bureau of Indian Affairs, Bureau of Land Management, and the Surface Transportation Board are cooperating agencies. DOE is not involved in this proposal or in the preparation of the EIS. However, DOE has considered the Private Fuel Storage Facility to be a reasonably foreseeable future action that is analyzed as part of the cumulative impacts associated with the Proposed Action of the repository EIS (see Chapter 8).

The Draft Environmental Impact Statement for the Construction and Operation of an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of the Goshute Indians and the Related Transportation Facility on Tooele County, Utah (DIRS 152001-NRC 2000), was published for public comment in June 2000.

13 (131)

Comment - 10 comments summarized

Commenters expressed their opposition to the production and testing of nuclear weapons. Reasons for their opposition include philosophical grounds and concerns about environmental contamination and wastes generated from nuclear weapons production and testing. Commenters also expressed opinions that the money used to maintain the U.S. nuclear arsenal could be better spent eliminating the arsenal, solving nuclear waste disposal issues, or on humanitarian causes.

Response

The United States no longer manufactures new-design nuclear weapons. DOE, under the Stockpile Stewardship and Management Program, is responsible for maintaining the safety and reliability of the United States nuclear weapons stockpile. The *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DIRS 103217-DOE 1996) describes DOE responsibilities, and analyzes the potential environmental impacts of proposed changes to the Nuclear Weapons Complex to support this mission.

This EIS analyzes the potential environmental impacts of constructing, operating and monitoring, and eventually closing a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, as well as the No-Action Alternative. Chapter 8 evaluates the cumulative impacts of stockpile stewardship and management activities at the Nevada Test Site, including subcritical testing of weapons components.

13 (211)

Comment - 10 comments summarized

Some commenters expressed dissatisfaction with the way members of their Congressional delegations, local political entities, other publicly funded organizations, or tribal councils conduct their business or themselves. In particular, issues related to adequate involvement and representation, campaign contributions, and project funding were raised.

Response

This EIS analyzes the potential environmental impacts of constructing, operating and monitoring, and eventually closing a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, as well as the No-Action Alternative. Commenters may submit their concerns about how members of Congress or other individuals or organizations conduct their business or represent their constituents directly to them.

13 (227)

Comment - 8 comments summarized

DOE received comments regarding civil disobedience and the use of peaceful, nonviolent protest. Some commenters wanted to assure DOE that there would be peaceful protests of spent nuclear fuel and high-level radioactive waste shipments to the proposed repository. Other commenters were concerned that peaceful protests could turn violent by response actions, citing incidents outside the United States as examples; expressed the opinion that these protests occurred and will continue to occur because the public has been excluded from the decisionmaking process; or questioned why the Draft EIS does not discuss the effect of civil disobedience on shipments to the repository.

Response

DOE recognizes that many persons in the United States oppose the manufacture, use, storage and transportation of nuclear materials and radioactive waste. DOE also recognizes the possibility of civil protests against these activities. DOE anticipates that if a repository were to be approved, any activities related to the implementation of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, including the related transportation, would occur in a peaceful manner. Although activities occurring outside the United States such as those cited by the commenters are outside the scope of this EIS, they do illustrate potential concerns. Section 6.2.4.2.3 and Section J.1.4.2.1 of this EIS consider the impacts of hypothetical, successful sabotage attempts on a cask en route to the repository. While acts of civil disobedience would unlikely involve breaching a cask, this analysis considers the maximum reasonably foreseeable consequences of such activities.

In transporting spent nuclear fuel and high-level radioactive waste to the proposed repository at Yucca Mountain, DOE organizations would work with representatives of other Federal, state, local, and Tribal governments and law enforcement agencies, as appropriate, to ensure that shipments progress as safely as possible. Personnel from these organizations will receive training, as appropriate, that includes responses to protests and other civil actions. DOE will also work with these organizations and its nongovernmental stakeholders to minimize the potential for confrontations.

DOE has included the public in the decisionmaking process, and will continue to do so. DOE made the Draft EIS available in more than 35 locations (public Reading Rooms and libraries) in 17 states and the District of Columbia, and on the Internet at http://www.ymp.gov/deis.htm; and mailed copies to stakeholders and others requesting one. Public hearings were held in 21 locations from California to Washington, D.C. DOE accepted comments through the mail, via the Internet, and in person at the public meetings. Because the Supplement to the Draft EIS focused primarily on matters involving repository design, the Department held three public hearings in Nevada during the comment period. More than 13,000 comments received on the Draft EIS and approximately 1,900 comments received on the Supplement to the Draft EIS are answered in this Comment-Response Document. DOE will continue public involvement activities with its stakeholders, including citizens groups and the media, and the general public, throughout the life of this project.

13 (618)

Comment - EIS000181 / 0005

The administration should also seek ways to streamline and economize the ridiculous EIS process, including by seeking new legislation if need be. DOE should become more of an action agency.

Response

The NWPA requires that DOE prepare an EIS for the construction, operation, and closure of a geologic repository at Yucca Mountain. DOE prepared this EIS consistent with the process-related requirements of the NWPA and the National Environmental Policy Act, and the Council on Environmental Quality and DOE regulations implementing the National Environmental Policy Act. The regulations that implement the National Environmental Policy Act establish a process, described in Section 1.5 of this EIS, that begins with scoping, followed by preparation of a draft EIS for public distribution and comment. The process culminates with preparation of a final EIS that includes responses to comments received on the Draft EIS. The NWPA also discussed in Section 1.5, influences the scope of this EIS. In addition to assisting in decisionmaking, a major emphasis of the EIS process is to promote public awareness of proposed actions and to provide opportunity for public involvement. For this reason, DOE does not believe it necessary to seek legislation to modify the process.

13 (1138)

Comment - EIS000270 / 0025

Factors that give rise to public concerns about and opposition to approval of the Yucca Mountain site include:

Omitting impacts of political and economic changes affecting the commercial nuclear and defense industries with respect to their continued safe management of all radioactive wastes.

Response

This EIS analyzes the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, and the No-Action Alternative. Issues related to the management of radioactive wastes by the commercial nuclear and defense industries are beyond the scope of this EIS.

13 (1205)

Comment - EIS000272 / 0002

We feel as a state (Georgia) -- and I know that the governor has indicated this to the Department of Energy very recently, within the last month, to the Secretary of Energy, that we have significant issues with transportation. We're looking at the possibility of nuclear -- of plutonium, weapons-grade plutonium, being shipped across the state coming from the west back to the east, to the Savannah River plant, if the plutonium fuel fabrication plan goes forward at the Savannah River Site, as well as the immobilization of that fuel. So the governor is highly concerned about the question of waste being brought into our state and about who's going to pay the bill for the training, what level of training is going to be necessary for these kinds of unanticipated and never-before-experienced holocaust type of accidents and emergencies that can emerge from this, potentially.

Response

This EIS analyzes the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain. Although issues related to the transportation of surplus weapons-usable plutonium through the State of

Georgia as part of the DOE Surplus Plutonium Disposition Program are beyond the scope of this EIS, DOE evaluated such potential impacts in detail in the Surplus Plutonium Disposition EIS (DIRS 118979-DOE 1999). Chapter 4 of that EIS describes transportation impacts, with detailed analyses in Appendix L of that document. In addition, comments from the State of Georgia Department of Natural Resources that included a number of transportation concerns, and the associated responses, are in the Comment Response Document (Volumes III and IV) of the Surplus Plutonium Disposition EIS.

13 (1243)

Comment - EIS010093 / 0002

The answer folks isn't unfettered energy policy "same oh same oh" but significant energy conservation. Dim the lights, auto time lighting switches, etc., etc. Solar or wind, energy accountability. Shut (text cut off).

Response

Thank you for your comment. DOE is committed to the development and responsible uses of all types of energy, including renewable energy sources such as geothermal, wind, solar, hydrogen, biomass, and hydropower. DOE's Office of Energy Efficiency and Renewable Energy is responsible for leading the Nation's efforts in the study of renewable energy sources. For information on the Office's activities, please visit its web site at http://www.eren.doe.gov, or write to U. S. Department of Energy, Office of Energy Efficiency and Renewable Energy, 1000 Independence Ave., S. W., Washington, DC, 28585.

13 (1548)

Comment - EIS000357 / 0007

Page 1-6. 1.2.2.2. How was the spent nuclear fuel from the "55 university- and government-owned test reactors" transported to Hanford and Savannah River? What was the accident record?

Response

University and government-owned spent nuclear fuel being considered for disposal in Yucca Mountain is transported to the Idaho National Engineering and Environmental Laboratory, not the Hanford Site. Section 1.2.2.2 discusses the small quantity of spent nuclear fuel that is generated from research conducted by approximately "55 university- and government owned test reactors." Transportation of university and government-owned test reactor fuel to the Idaho National Engineering and Environmental Laboratory for consolidated storage is an ongoing process that DOE is conducting in accordance with the Record of Decision for the *Department of Energy Programmatic Spent Nuclear Fuel Management and the Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs* (DIRS 103205-DOE 1995). This activity is outside the scope of this EIS, which analyzes the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, and analyzes the No-Action Alternative.

In the more than 2,900 shipments over the past three decades, there has not been an accident involving the transportation of spent nuclear fuel or high-level radioactive waste that has resulted in the release of radioactive contents from the package. The *Department of Energy Programmatic Spent Nuclear Fuel Management and the Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Environmental Impact Statement* (DIRS 101802-DOE 1995) includes historical data regarding shipments of spent nuclear fuel. For more recent information regarding the transportation of radioactive materials, please visit the National Transportation Program's web site at www.ntp.doe.gov.

13 (1906)

Comment - EIS000464 / 0002

But first I would like to talk about so-called burial or dry cask burial, or otherwise known as vitrification. Russia was first to try dry cask vitrification in their Ural Mountain nuclear dump. It exploded in the 1950s because heat is continually being generated along with hydrogen gas. Temperatures can rise to 5,000° and you will have a thermal explosion. There is now a 100-mile-radius dead zone in the Ural Mountains. No one is allowed near the place.

Then Dr. Roy told me France tried vitrification and found it a failed technology. It simply will not work. Nothing can contain the most corrosive element in the universe, high-level nuclear waste. It is going to leak out or explode or both.

Response

The commenter could be referring to an explosion of an underground liquid radioactive waste storage tank at the Mayak nuclear complex on September 29, 1957, following a failure of the tank cooling system. These tanks contained liquid nuclear processed waste, not spent nuclear fuel or immobilized (vitrified) high-level radioactive waste. An accident of a similar nature could not occur at the proposed Yucca Mountain Repository because DOE would emplace only waste in a stable, solid form.

With regard to vitrification efforts in France, the Waste Act of 1991 established a legislative framework for disposition of high-level and long-lived intermediate-level wastes and initiated a 15-year research program in three areas:

- 1. Separation and transmutation of long-lived isotopes in waste
- 2. Disposition in deep geological formations (via underground research laboratory tests)
- 3. Immobilization processes and long-term surface storage.

According to the 1991 Act, the French government will submit an overall assessment of the three research areas (including immobilization processes) to Parliament by 2006 (DIRS 156712-National Research Council 2001).

DOE has successfully demonstrated vitrification technology at a number of facilities in the DOE Complex, and has implemented the technology at the West Valley Demonstration Project in New York State and at the Defense Waste Processing Facility at the Savannah River Site in South Carolina. The Department is also planning to use vitrification for tank waste at the Hanford Site in Washington State.

13 (2004)

Comment - EIS000528 / 0001

I recently attended a meeting concerning Nuclear Waste at Yucca Mountain at C.O. Bastian school in Caliente, NV. At that meeting a statement was made indicating that the people in Lincoln County had been made aware of and are kept updated on the issue of Nuclear Waste Storage in Yucca Mountain. This is not true. The people stating, or in charge of this have a committee, but have masked it from the public by calling it the Impact Alleviation Committee. I recently polled twenty people and only two out of the twenty knew what this committee was or what it did. I am sure that if this was named the Nuclear Waste Impact Alleviation Committee that all of the people I asked would have known and more than two or three people would show up to their meetings. Local residents poorly attend the meeting because they are not advertised and results not published of the meeting.

Response

The Impact Alleviation Committee is a Lincoln County and City of Caliente organization that is neither accountable to nor represents DOE. The Impact Alleviation Committee conducts and advertises its meetings in accordance with its own practices and procedures.

13 (2072)

Comment - EIS000765 / 0002

The first comment may be stretching the scope of this forum somewhat, as it relates to the management of the nation's surplus weapons plutonium. Thank God we have this problem because it means that we've reduced our stockpile of operational nuclear weapons. However, I am not in favor of any plan of disposal of this plutonium, some 50 metric tons, in a manner that would forever preclude its possible use by future generations as a mixed-oxide reactor fuel. The technologies for producing energy are now undergoing rapid advances, but our need for energy is also increasing and must be met. But of equal importance is our need for energy that does not consume carbon fuels and discharge carbon dioxide into the atmosphere. It is possible, according to some scientists, that we will experience a global warming crisis in the future. If that occurs, our future generations may need every bit of nonfossil fuel energy they can lay their hands on. This plutonium is a national resource. Let's not throw it away.

Response

Thank you for your comment. DOE evaluated the disposition of 50 metric tons (55 tons) of plutonium declared surplus to national defense needs in its *Surplus Plutonium Disposition Final Environmental Impact Statement* (DIRS 118979-DOE 1999). The Record of Decision for that EIS specified that approximately 33 metric tons (36 tons) of the surplus plutonium would be fabricated into mixed-oxide fuel for use in domestic commercial nuclear

reactors; but that approximately 17 metric tons (19 tons) will be immobilized for direct disposal (65 FR 1608, January 11, 2000).

13 (2628)

Comment - EIS000714 / 0004

Per SCIENTIFIC AMERICAN May '96 the DOE now admits that enormous amounts of the highly radioactive liquids and solids were pumped or dumped into the ground and estimates that throughout all the weapons complexes, billions of cubic meters of soil, groundwater and surface water are contaminated.

Charges for criminal violations should be brought against the DOE/AEC for past, present and planned future damage of the highest order to the United States and its injured citizens - damage that has been deadly and that may last for thousands of years.

Response

DOE has long acknowledged that its activities and those of its predecessor agencies in the production of nuclear weapons resulted in the contamination of facilities and the surrounding environment at many of its sites around the country. The Department is spending billions of dollars to clean up those sites, and will continue those efforts until all sites have been cleaned up to specified standards. DOE's goal is to have completed cleanup at more than 90 percent of its sites by 2006. At most sites, DOE will continue long-term surveillance and monitoring activities to ensure the protection of human health and the environment (DIRS 107294-DOE 1998).

13 (2790)

Comment - EIS000882 / 0003

We need more money spent on research to make use of the high level radioactive waste and contain plutonium that is in the waters in Southern Nevada.

Response

Thank you for your comment. The scope of this EIS is limited to an analysis of the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain. Other issues concerning high-level radioactive waste, plutonium, or other materials are beyond the scope of this EIS.

13 (2793)

Comment - EIS000887 / 0003

If it's so safe we should require the heads of the DOE to live within 10 miles of the site for the rest of their lives. Do we have any takers? I think NOT!

<u>Response</u>

This EIS evaluates the potential environmental impacts of constructing, operating and monitoring, and eventually closing a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, including potential health effects to the general public. This EIS identifies the maximally exposed individual as being a resident located on the southern boundary of the land withdrawal area. Section 4.1.7.5.3 of the EIS discusses potential health effects to this maximally exposed individual, as well as to the general population. Analyses indicate that the likelihood of the maximally exposed individual incurring a latent cancer fatality from repository activities over a 70-year lifetime would be about 0.000016 to 0.000031 (1.6 to 3.1 in 100,000) under the flexible design repository operating modes. The estimated total number of latent cancer fatalities in the exposed population over 115 to 341 years for the range of repository operating modes would range from 0.46 to 2.0. During the time the project would be active the estimated number of cancer deaths unrelated to the project would range from about 30,000 to 89,000 in the exposed population.

13 (3206)

Comment - EIS001133 / 0003

I thought the [there] was a ban on nuclear weapons. Lets not store the waste on the earth to poison what Mother Nature has left us.

Response

The NWPA states that the Federal Government has the responsibility to dispose of spent nuclear fuel and high-level radioactive waste that has accumulated and continues to accumulate across the United States. It also identified the Yucca Mountain site in southern Nevada as a potential location for a monitored geologic repository and directed DOE to characterize the site for suitability. As required by the NWPA, the EIS analyzes a Proposed Action to construct, operate and monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain.

13 (3657)

Comment - EIS000926 / 0007

What about the Waste Isolation Plant in Carlsbad, New Mexico where testing is done for safe disposal of nuclear waste - radioactive waste. Why have we not heard about this???

Response

DOE operates the Waste Isolation Pilot Plant to dispose of transuranic waste left from research and production of nuclear weapons. This waste is different from the spent nuclear fuel and high-level radioactive waste that DOE would dispose of Yucca Mountain. For more information about the Waste Isolation Pilot Plant, please see the *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement* (DIRS 148723-DOE 1997) or visit the Plant's web site at http://www.wipp.carlsbad.nm.us/wipp.htm.

13 (3921)

Comment - EIS001287 / 0001

We do appreciate the Department of Energy's attempt to thoughtfully and carefully devise a long-range plan for the disposal of 70,000 metric tons of nuclear waste. While we believe there are major problems with the YMP [Yucca Mountain Project], we are even more worried about the disposal of nuclear wastes in many other nations. In countries lacking democratic traditions there will be no environmental impact statements, no public hearings, no openness in the process for siting and burial. Worldwide, there will be hundreds of thousands of metric tons to be disposed of, in coming decades. Many nations will not do this safely and effectively. Many people will die and their land will be poisoned, for all practical considerations, forever. This makes the continued development of nuclear power, as well as nuclear weapons, seem reckless and irresponsible. Added to these concerns is the prospect that spent nuclear fuel can be reprocessed into weapons-usable materials. Thus nuclear power is likely to fuel the proliferation of nuclear weapons around the globe. Pandora's box has been opened. The YMP is an attempt to close the box. It's a better attempt than we anticipate elsewhere, but not without problems.

Response

Thank you for your comment.

13 (3962)

Comment - EIS001547 / 0001

Now we do appreciate the Department of Energy's attempt to thoughtfully and carefully devise a long-range plan for the disposal of this waste. While we believe there are major problems with the Yucca Mountain project, we are even more worried about the disposal of nuclear wastes in many other nations. In countries lacking democratic traditions, there will be no environmental impact statements, no public hearings, no openness in the process of sighting and burial. Worldwide, there will be hundreds of thousands of metric tons to be disposed of in coming decades.

Many nations will not do this safely and effectively. Many people will die and their land will be poisoned, for all practical considerations, forever. This makes the continued development of nuclear power, as well as nuclear weapons, seem reckless and irresponsible. Added to these concerns is the prospect that spent nuclear fuels can be reprocessed into weapons usable materials. Thus nuclear power is likely to fuel proliferation of nuclear weapons around the globe. Pandora's box has been opened. The Yucca Mountain project is an attempt to close the box. It's better than we anticipate elsewhere, but is not without problems.

Response

Thank you for your comment.

13 (4139)

Comment - EIS001127 / 0002

We collectively have created this problem. Let me note however that the source of this problem is really not the electric industry or the Department of Energy. Rather it is the arms industry. Nuclear weapons are the source of the problem. Atoms for Peace, under President Dwight Eisenhower, became the focus of a governmental effort to find some redeeming qualities to nuclear fission. While the government was busy building nuclear warheads, our government sought to sell Atoms for Peace to the public. A variety of laws then made nuclear power attractive, and profitable, to the electric utilities. Today we collectively live with the results of the decisions made by our government to encourage nuclear production of electricity. I think all of us in this room know that there is a significant hazard in handling and storing of waste. Where we differ, I think, is over the level of confidence we place in our ability to handle it safely.

Response

Thank you for your comment.

13 (4337)

Comment - EIS001202 / 0007

I demand legislation providing for reduction of energy company inventories. If their cooling ponds are full, each rod taken gives them more storage space for new production, at unbelievable continuing expense to the public. This [is] charity to energy power utilities. We in Northeast Ohio have already given.

Response

Ratepayers and utilities are paying the cost of disposal of the spent nuclear fuel generated by the nuclear power industry. The Nuclear Waste Policy Act of 1982 specifies that the Federal Government is responsible for providing for the permanent disposal of spent nuclear fuel and high-level radioactive waste, and that the costs of this disposal should be the responsibility of the generators and owners of the spent nuclear fuel and high-level radioactive waste. Commercial utilities pay a fee of 1mil (one-tenth of 1 cent) per kilowatt-hour of electricity generated by nuclear energy to cover disposal costs for commercial spent nuclear fuel. The Federal Government pays for waste generated and owned by the United States from taxpayer revenues as appropriated by Congress.

Utility fees go into the Nuclear Waste Fund where unused portions earn interest. Since passage of the Nuclear Waste Policy Act of 1982, utilities and their ratepayers have paid approximately \$9.8 billion into the Nuclear Waste Fund to pay for the development of a repository for the disposal of spent nuclear fuel and high-level radioactive waste. By the end of Fiscal Year 1999, the program had spent approximately \$6 billion for the purposes specified in the Act. With accrued interest, the value of the Nuclear Waste Fund was \$8.5 billion at the end of Fiscal Year 1999. The most recent review showed that approximately 70 percent of disposal-related costs would be paid from the Nuclear Waste Fund, and approximately 30 percent, to cover the cost of Federally owned spent nuclear fuel and high-level radioactive waste, would come from taxpayer revenues. Thus, the private commercial utilities are "paying their fair share" of repository program costs along with taxpayers. However, the cost estimates in the EIS do not consider and are not sensitive to the source of funding (see Sections 2.1.5 and 2.2.3 of the EIS).

13 (4687)

Comment - EIS001471 / 0001

Thanks very much. Just to pick up where I was at. I did want to talk some more about the history of actual shipments of high-level waste, and again go back to Germany where there was a shipment of high-level waste sent from Germany to France for reprocessing. And upon its return to the border between France and Germany it was discovered to be 3,000 times the permissible level of radiation on the surface of the casks. So there was a contamination event.

And this information was kept from the public for a considerable period of time and created quite a scandal when it was finally released. And so that's another example of things going wrong with high-level waste transportation.

Response

DOE is uncertain about the incident to which the commenter is referring, but there were a few incidents in 1997 involving German, Swiss, and United Kingdom shipments to France in which external surface contamination was in excess of routine contamination limits. Shipments were temporarily halted but resumed in 1998. Investigations

determined that there were no radiological consequences to workers or the public, but did reveal an absence of cleanliness in Electricite de France reprocessing plants. Monitoring, inspection, and other measures were increased in response to these incidents. A working group comprised of experts from all four countries was formed in 1998 to ensure future safety of spent fuel transportation. The common opinion of the working group was that the corrective measures implemented following the incidents allow safe spent fuel transportation (DIRS 156709-SNSI 1998).

DOE appreciates the commenter's concern that incidents could occur during the transport of spent nuclear fuel and high-level radioactive waste. However, the DOE safety record demonstrates that transportation of these materials can and does occur safely. There has never been an accident involving the transportation of spent nuclear fuel or high-level radioactive waste in the United States that resulted in the release of radioactivity from the cask. With regard to the potential for shipping casks with surface contamination, each facility that ships such materials has rigorous procedures to minimize the possibility that a cask with external contamination above allowable limits could leave the site. In addition, casks shipped to Yucca Mountain would not be opened between the shipping location and the repository site. Procedures at the repository would ensure that if a cask arrived with external contamination above allowable limits, it would be segregated and decontaminated prior to acceptance for emplacement or return to the point of origin.

13 (4801)

Comment - EIS001535 / 0004

What will happen to the tremendous amount of dangerous, so-called "low level wastes" that these nuclear power generating facilities generate?

Response

Utilities dispose of low-level radioactive waste in accordance with their operating licenses, Nuclear Regulatory Commission regulations, and the provisions of the Low-Level Radioactive Waste Policy Act. The nuclear industry uses privately operated low-level radioactive waste disposal facilities; this Act requires the development of more such facilities. It also requires that states form regional compacts for the purpose of developing low-level radioactive waste disposal sites by regions. If approved, the geologic repository proposed for Yucca Mountain would be used for the disposal of spent nuclear fuel and high-level radioactive waste, not low-level radioactive waste.

13 (4862)

Comment - EIS001708 / 0002

Start the current [government] over [with] young people.

Response

Thank you for your comment.

13 (4893)

Comment - EIS000337 / 0033

Pg. 8-11, Figure 8-3: I am glad to see a nuclear rocket development station on the test site.

Response

Thank you for your comment.

13 (4980)

Comment - EIS010144 / 0002

Decisions are going to be made. Just like before when the lights were out, we have to make sure that the lights will stay on in Nevada. Such as other parts of the country too, the lights must stay on. We must start a national energy policy. And like Mr. Bush has said, and to quote Mr. Bush, science will determine what will happen with a national energy policy. Science will also determine where the greatest site in America is for the storing of spent nuclear fuel.

Response

This EIS analyzes a Proposed Action to construct, operate and monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, and analyzes the No-Action Alternative.

13 (5218)

Comment - EIS001322 / 0001

If the proposed disposal is estimated to be safe, why not have the nuclear industry take full responsibility - full liability - for any harm involved? It's their mess - why should taxpayers take the risk for them? Our subsidizing their risk gives them an unfair competitive advantage over other energy sources.

Response

Taxpayers are not subsidizing utilities' costs for disposal of spent nuclear fuel. Taxpayers would, however, fund the cost for disposal of spent nuclear fuel and high-level radioactive waste that belongs to the Federal Government. The Nuclear Waste Policy Act of 1982 specifies that the Federal Government is responsible for providing for the permanent disposal of spent nuclear fuel and high-level radioactive waste, and that the costs of this disposal should be the responsibility of the generators and owners of these materials. Commercial utilities pay a fee of 1 mil (one-tenth of 1 cent) per kilowatt-hour of electricity generated by nuclear energy to cover disposal costs for commercial spent nuclear fuel. The Federal Government pays for waste generated and owned by the United States from taxpayer revenues as appropriated by Congress.

Utility fees go into the Nuclear Waste Fund where unused portions earn interest. Since passage of the Nuclear Waste Policy Act, utilities and their ratepayers have paid approximately \$9.8 billion into the Nuclear Waste Fund to pay for the development of a repository for the disposal of spent nuclear fuel and high-level radioactive waste. By the end of Fiscal Year 1999, the program had spent approximately \$6 billion for the purposes specified in the Act. With accrued interest, the value of the Nuclear Waste Fund was \$8.5 billion at the end of Fiscal Year 1999. The most recent review showed that approximately 70 percent of disposal-related costs would be paid from the Nuclear Waste Fund and 30 percent from taxpayer revenues. Thus, the private commercial utilities are "paying their fair share" of repository program costs along with taxpayers. However, the cost estimates in the EIS do not consider and are not sensitive to the source of funding (see Sections 2.1.5 and 2.2.3 of the EIS).

13 (5555)

Comment - EIS010235 / 0008

Will hasty acceptance of this evolving design influence other countries to adopt this untested model, due to the United States' powerful international status?

Response

The repository design has evolved to reflect ongoing evaluations and other influences such as public comments and design and performance-related reviews by external organizations, such as the Nuclear Waste Technical Review Board. This EIS analyzes the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain. The extent to which the international community would adopt engineering designs evaluated for the Yucca Mountain site, is speculative and outside of the scope of this EIS.

13 (5642)

Comment - EIS010100 / 0003

Can we really afford the cost and dangers of nuclear power in the long run? Cleanup costs are unbearable to many like us (U.S.) in the Cold Water Creek Florissant Valley that used to be flowers not radioactive waste there/here now.

Response

The Nuclear Waste Policy Act of 1982 states that the Federal government has the responsibility to dispose of spent nuclear fuel and high-level radioactive waste that has accumulated and continues to accumulate across the United States. The Act identifies the Yucca Mountain site in southern Nevada as a potential location for a monitored geologic repository and directed DOE to characterize the site for suitability. As required by the Act, the EIS analyzes a Proposed Action to construct, operate and monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain.

13 (5917)

Comment - EIS000815 / 0007

Although not a part of this DEIS, the United States and the international community need responsible programs for appropriate control and disposition of weapons source materials, i.e., natural and depleted uranium, including that remaining from uranium enrichment. During the final two decades of the Cold War, weapons plutonium was produced in reactors at the SRP/SRS from these materials. An article in the March 2, 1999 issue of The New York Times by Matt Wald discusses plans by the Department of Energy (DOE) to turn depleted uranium into salable goods, but does not mention that depleted uranium "targets" can be used for production of weapons plutonium in any neutron source, i.e., research reactor, fusion device, medical isotope production reactor, commercial nuclear power plant, etc., or in an accelerator. Moreover, plutonium produced in targets would be much easier to recover, because most of the intensely radioactive fission products are in the reactor fuel. These materials should be stored under appropriate controls for eventual destruction through use in advanced nuclear power plants for production of electricity or other important and valuable purposes. The planned compromise by the US of important policies against use of commercial nuclear power plants for production of nuclear weapons materials makes this need all the more compelling.

Response

Management of the materials mentioned in this comment is not within the scope of this EIS. However, DOE manages all strategic materials (that is, the quantity of plutonium and highly enriched uranium material reserved for future weapons use) in accordance with strict security procedures, and protects them commensurate with the impact of the loss, theft, compromise, or unauthorized use of the material, as determined by vulnerability and risk analyses.

13 (6781)

Comment - EIS010141 / 0001

The first thing that I'm going to present to you is my favorite saying of Lake Barrett. And Lake Barrett is the head of all this, and what he says is we have assumed uncertainties for the two repositories, and remember it's not one, it is two repositories.

Response

When Congress passed the NWPA, it affirmed that the Federal Government is responsible for the permanent disposal of spent nuclear fuel and high-level radioactive waste. Congress envisioned more than one repository, prohibiting the Nuclear Regulatory Commission from approving a license for the emplacement of more than 70,000 metric tons of heavy metal (MTHM) in the first repository until a second repository is in operation [NWPA, Section 114(d)]. The total projected inventory of spent nuclear fuel and high-level radioactive waste is more than 70,000 MTHM. Emplacement of more than 70,000 MTHM at Yucca Mountain would require legislative action by Congress unless a second repository was in operation.

13 (6792)

Comment - EIS010133 / 0002

There's some of you folks who think there's going to be no end to oil, natural gas or coal. Well, some of us feel that, by gosh, Yucca Mountain may be a renewable energy resource.

Response

Thank you for your comment.

13 (6959)

Comment - EIS010134 / 0002

We have Senator Murkowski, who was elected in 1980, and Senator Domenici, who was elected in 1972, who were the proponents of the 1987 nuclear bill -- of the repository bill. All it was was an ending bill to them. They just didn't want this stuff in their states.

We have Vice President Cheney and Bruce Babbitt, who either was a hypocrite when he was in the Clinton administration or he's a hypocrite today, I'm not sure which one he is, saying that nuclear energy is clean, safe and economic. Boy, would I love to debate that.

Clean? Sure it's clean if all you look at is a smoke stack. What about this toxic nuclear waste that they want to transport through 41 states over 28 years, six convoys a day? I mean, that's nuts. That ain't clean.

Safe? Well, I guess we have to forget about Three Mile Island and Chernobyl, then it's safe.

Economical? This industry in 1954 when we decided to use nuclear power to produce electricity our government gave you, all of us, the liability for the waste. What other industry do we go out and collect their garbage? Do we collect garbage off the auto manufacturers? That belongs -- that responsibility was theirs. It should never have been ours, so we were sold out in '54. They got a lot of power today, but we were sold out in '54.

And in the meantime they passed the Price-Anderson Bill which limited their liability, their liability in the event of an accident. And all the while they began subsidies and tax breaks, research and development moneys.

Economical? They made a statement when they first started producing nuclear power it's going to be too cheap to meter. You know what, now it's too expensive to use.

So you can't trust your government. Please don't have blind faith in them. As far as I'll give you another reason why you shouldn't have blind faith or you're a veteran -- Agent Orange, posttraumatic syndrome, Gulf War Syndrome.

Nuclear veterans -- they stood, they made them stay in the pits. They said when the concussion comes back, we're going to give you these nice glasses. You can get up and look at this nice show. It's very pretty. And they have the God damn nerve to put those troops there, and when they got sick they didn't pay them.

They didn't pay them of course with Agent Orange. For 20 years after the war they didn't even recognize them. Posttraumatic syndrome, today they don't recognize it. They say they're phonies. Gulf War Syndrome, they jerked those poor guys around with talking about one syndrome when it was 12 different things and they knew it was 12 different things.

So don't just have blind faith in your government, because they do lie to you. What about the miners at the Test Site? Now, we talk about people with protected jobs. These guys all the while they said oh, it's safe. I got a nice job. I'm making 60,000 a year. All of a sudden they got sick now. They want compensation and they're getting compensation.

You know, they didn't give the veterans compensation at the same time. They gave them compensation. So don't trust your government. Don't have blind faith in anything that's done in government.

Response

Thank you for your comment.

13 (7200)

Comment - EIS010162 / 0002

What is the government doing? They put 55 metric tons at SRS. And what did our friend from Savannah River say from South Carolina? That's the most -- second most polluted place in the country. And I read volumes on it and it's criminal what they have done to SRS. Next to Hanford it is number two. There's no question about it.

Response

When Congress passed the NWPA, it affirmed that the Federal Government is responsible for the permanent disposal of spent nuclear fuel and high-level radioactive waste. DOE has long acknowledged that its activities and those of its predecessor agencies in the production of nuclear weapons resulted in the contamination of facilities and the surrounding environment at many of its sites around the country. The Department is spending billions of dollars to clean up those sites, and will continue those efforts until all sites have been cleaned up to specified standards.

13 (7352)

Comment - EIS001573 / 0004

The Department of Energy has an inherent number of interests and should not be the lead agency on the development of a permanent repository. Let me give you one good example. I'm an attorney and I represent a number of clients in Michigan in a federal court action pending in Kalamazoo U.S. District Court to stop a ridiculous experiment in the use of mixed oxide plutonium fuel in Canadian reactors. Part of the scheme involves the burning of about 34 tons of nuclear weapons, decommissioned weapons material, that has been converted into fuel in about half a dozen commercial nuclear power reactors in the south eastern United States. 34 tons of plutonium translates into several thousand tons of spent fuel, once that material is burned up in those reactors.

So, in effect, the Department of Energy is directly sponsoring and, in fact, has entered into contracts with several different utility companies to commence the burning of decommissioned nuclear weapons in American reactors to produce a far more radioactive material than otherwise exists in the form of decommissioned nuclear weapons grade material.

At present, if it weren't burned in reactors, that material could be immobilized in a ceramic [glass] type of fashion, could be far less expensively stored, could be far less expensively insulated and isolated from saboteurs, from anyone who might want to make the bomb or make nuclear fuel out of it. Nonetheless, the Department of Energy is going ahead officially, formally and contractually to make high-level, heavily irradiated spent fuel, ultimately, out of it.

Response

The NWPA specifically directs DOE to be the lead agency in developing a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste. As part of its responsibilities, DOE has prepared this EIS, which analyzes the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close, a geologic repository at Yucca Mountain. Other DOE activities, such as those related to the disposition of surplus plutonium from dismantled nuclear weapons, are outside the scope of this EIS. The Department is responsible for the Surplus Plutonium Disposition Program.

DOE evaluated the potential environmental impacts of the Surplus Plutonium Disposition Program in the *Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement* (DIRS 103215-DOE 1996) and the *Surplus Plutonium Disposition Final Environmental Impact Statement* (DIRS 118979-DOE 1999). The Surplus Plutonium Disposition EIS evaluates the disposition of 50 metric tons (55 tons) of surplus plutonium by fabricating as much as 33 metric tons (36 tons) into mixed-oxide fuel and irradiating that fuel in commercial nuclear power reactors and immobilizing as much as 17 metric tons (19 tons) in glass at the Defense Waste Processing Facility at the Savannah River Site. DOE has contracted with a consortium formed by Duke Engineering & Services, COGEMA, Inc., and Stone & Webster (DCS) to design, construct, and operate the mixed-oxide fuel fabrication facility and to irradiate the fuel in Duke Power Company's Catawba and McGuire reactors. This activity is independent of the one-time shipment of a small amount of mixed-oxide fuel [nine fuel rods containing less than 120 grams (4.2 ounces) of plutonium] to Canada in January 2000 under the Parallex Project. The latter activity was evaluated in the *Environmental Assessment for the Parallex Project Fuel Manufacture and Shipment* (DIRS 157153-DOE 1999).

Both the spent mixed-oxide fuel and immobilized plutonium are in the inventory of spent nuclear fuel and high-level radioactive waste that DOE would place in a monitored geologic repository at Yucca Mountain. The National Academy of Sciences has determined that both waste forms meet the Spent Fuel Standard. Waste forms meeting that standard would offer major nonproliferation and arms reduction benefits compared with leaving the material in storage in weapons-usable form (DIRS 100018-National Research Council 1995). There will not be a substantial increase in the amount of spent nuclear fuel generated by using the plutonium as mixed-oxide fuel because that fuel would replace mostly traditional low-enriched uranium fuel. Under the Preferred Alternative in the Surplus Plutonium Disposition EIS, the use of mixed-oxide fuel made from surplus plutonium would generate approximately 199 more low-enriched uranium fuel assemblies than would the use of only low-enriched uranium fuel in the designated commercial nuclear reactors (DIRS 118979-DOE 1999).

13 (8019)

Comment - EIS000817 / 0070

Two things happened that I think are relevant during the interim -- the MOX transport mess in Michigan with the Parallex Project for one. If that is representative of the way citizens and NEPA regulations are going to be treated in future radioactive shipments, then I foretell disaster. If things are going to be done in secret, without full notification of local authorities and citizens, then there is bound to be more and more opposition. Certainly an EIS was required for Parallex and not an EA. You can't segment such a huge project. It was all handled very badly.

Response

This EIS analyzes the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain. Activities conducted for the Parallex Project are outside the scope of this EIS. However, DOE believes that it has evaluated the potential environmental impacts of the Parallex Project in the Environmental Assessment for the Parallex Project Fuel Manufacture and Shipment (DIRS 157153-DOE 1999), for which it issued a Finding of No Significant Impact. Although the Environmental Assessment evaluated the fabrication and transport of as much as 26.8 kilograms (59 pounds) of mixed oxide fuel, DOE made a one-time shipment of less than 120 grams (4.2 ounces) of plutonium in nine fuel rods to the Atomic Energy of Canada, Limited, test reactor at Chalk River, Ontario.

DOE has kept the public informed of its activities related to the Parallex Project, including holding four public meetings in Michigan to discuss its decision to use Sault Saint Marie, Michigan, as the crossing point from the United States into Canada. These meetings were held between October 26, 1999, and November 1, 1999, before the shipment of the mixed oxide fuel in early January 2000. Participants discussed modes of transport in the United States and Canada and other issues.

13 (8244)

Comment - EIS002286 / 0004

The DOE has not solved the waste problem permanently. Therefore, they should use their money-making industry that, you know, is involved in it. They are all getting paid to decide whether or not Yucca Mountain is going to go forth or not. They have decided, even if it does go forth, there is still going to be waste out there. What are we going to do with all the other waste? They say the site is for 70,000 metric tons. They have already said there's going to be over a hundred some odd metric tons. That's if the reactors continue for ten more years. What's going to stop them from making more reactors, and what's going to stop all the medical waste and all the waste attributed to weapons production?

Response

When Congress passed the Nuclear Waste Policy Act of 1982, it affirmed that the Federal Government is responsible for the permanent disposal of spent nuclear fuel and high-level radioactive waste. Radioactive medical wastes are classified as low-level radioactive waste, which would not be emplaced in the proposed repository. Congress envisioned more than one repository, prohibiting the Nuclear Regulatory Commission from approving a license for the emplacement of more than 70,000 metric tons of heavy metal (MTHM) in the first repository until a second repository is in operation [NWPA, Section 114(d)]. The total projected inventory of spent nuclear fuel and high-level radioactive waste is more than 70,000 MTHM. Emplacement of more than 70,000 MTHM at Yucca Mountain would require legislative action by Congress unless a second repository was in operation.

The National Energy Policy recommends the safe expansion of nuclear energy by establishing a national repository for nuclear waste, and by streamlining the licensing of nuclear powerplants (DIRS 156756-Cheney 2001). Moreover, it is reasonably foreseeable that Congress would take such a legislative action. Chapter 8 of this EIS analyzes cumulative impacts from the disposal at Yucca Mountain of all spent nuclear fuel and high-level radioactive waste projected to be produced through 2046 for which DOE would retain ultimate responsibility.

13 (8265)

Comment - EIS001950 / 0005

Even the current movement of LLRW is threatening all the people in the communities along current transportation routes. I have heard of 3 incidents involving waste trucks heading toward the test site in the last past 6 months. All

occurred within 150 miles of the test site boundaries, one involving a rip in the side of the truck and "Loss of Material."

Response

DOE acknowledges that incidents occur during the transport of radioactive materials, but emphasizes that occurrences have been rare and impacts have been minimal. In addition to using only shipping containers and contractors certified or licensed for transport of these materials, DOE and contractor personnel receive training in their handling and transport. DOE responds immediately to such incidents, thoroughly investigates their causes, and incorporates lessons learned into programs and procedures to reduce or minimize the potential for future occurrence.

This comment cites incidents during the transport of low-level radioactive waste. While not minimizing the seriousness of incidents involving such waste, DOE would transport spent nuclear fuel and high-level radioactive waste in containers that are much more robust than the Type A containers used for low-level waste. In addition to meeting the standards for Type A containers, Type B containers must provide a high level of assurance that, even in severe accidents, they would maintain their integrity with essentially no loss of the radioactive contents or serious impairment of the shielding, and maintain subcriticality capability. The DOE safety record demonstrates that transportation of spent nuclear fuel and high-level radioactive waste can occur safely. There has never been an accident involving transportation of these materials in the United States that resulted in a release of radioactive contents.

13 (8352)

Comment - EIS001627 / 0004

The space available for storage of spent nuclear fuel at the generating stations is limited. Even if some utilities are able to expand their own storage facilities, there will come a point when no additional storage is available and the operators will have to shut the reactors down permanently. As generation is taken off the market, the available supply is diminished and the prices for the remaining energy sources will increase. This will hit customers hard who are trying to replace the power lost with the closing of nuclear generators.

Response

In passing the Nuclear Waste Policy Act in 1982, Congress affirmed that the Federal Government is responsible for the permanent disposal of spent nuclear fuel and high-level radioactive waste. To that end, Congress, in the Nuclear Waste Policy Amendments Act of 1987, had directed the Secretary of Energy to determine whether to recommend that the President approve the Yucca Mountain site for development of a repository for the permanent disposal of these materials.

13 (8497)

Comment - EIS000817 / 0159

P. 7-43. I have not seen this NRC EIS for relicensing plants and wonder how they evaluated unloading casks and loading a replacement cask. I'd really like to see that, and frankly don't know how they did it since no cask has ever been unloaded. Surely if they relicense plants, this will have to be done. Relicensing any plant for 20 years would be a grave mistake and put an extra burden on waste storage by allowing more to be created -- following the major mistake all through nuclear history by creating more with no plan workable as to what to do with it forever! Pools are getting old, reactors are getting brittle -- it is a dangerous business to keep these aging plants going, I think. More and more waste creation makes decommissioning more and more of a problem and pushes it to future generations. Renewables are ready! Let's use them instead.

Response

Section 7.3 of the EIS states, "DOE based its estimates of the potential impacts from continued storage of commercial spent nuclear fuel on a representative site. The results of the analysis described in the previous section are consistent with the Nuclear Regulatory Commission's (NRC's) findings in its *Generic Environmental Impact Statement for License Renewal of Nuclear Plants* (DIRS 101899-NRC 1996). The Commission's EIS is available on the Yucca Mountain web site at http://www.ymp.gov, as well as in the reading rooms and libraries identified in Section D.8 of this EIS. For additional information concerning that EIS, please contact the Commission directly.

DOE is committed to the development and responsible use of all types of energy, including renewable energy sources such as geothermal, wind, solar, hydrogen, biomass, and hydropower. DOE's Office of Energy Efficiency

and Renewable Energy is responsible for leading the Nation's efforts in the study of renewable energy sources. For information on the Office's activities, please visit its web site at http://www.eren.doe.gov, or write to U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, 1000 Independence Ave., S.W., Washington, DC, 20585.

13 (8550)

Comment - EIS002283 / 0002

One of my concerns is an issue called DU rounds. I am trying to get to the bottom and find out what these depleted uranium rounds are. I know we processed close to two million rounds of depleted uranium rounds now and turned them into weapons, and I am real concerned because I hope that's not what they are planning on doing with an awful lot of the rest of the nuclear waste. You know, that two million rounds of this stuff, we are talking about disposal of 70,000 tons.

I have a real ugly feeling knowing the history of the government and corporations like Wachenhut [Wackenhut Services, Inc.] that this is not good news. Those rounds -- you can't tell me that those rounds are safe. I just don't buy it. I don't buy it a bit.

Response

The rounds mentioned in the comment are nonexplosive metals fabricated from depleted uranium. Depleted uranium is the material, primarily uranium-238, remaining after the removal of the fissile isotope uranium-235 from uranium ore. In the United States, it occurs most often as depleted uranium hexafluoride, a compound of uranium and fluorine. The *Final Programmatic Environmental Impact Statement for Alternative Strategies for the Long-Term Management and Use of Depleted Uranium Hexafluoride* (DIRS 152493-DOE 1999) describes the DOE depleted uranium inventory. DOE does not plan to dispose of depleted uranium in the proposed repository at Yucca Mountain.

13 (8682)

Comment - EIS001837 / 0034

The United States must get out of the business of producing massive quantities of enriched uranium (U.S. Enrichment Corporation) and selling it overseas. This act is akin to producing tobacco for foreign sales. You are hurting the children and the future of mankind. You know that it is harmful to the health so stop producing it and stop selling it overseas. Nuclear activist Jeff Wright exposed what the U.S. Enrichment Corporation is doing and this friend of PARDs is in jail today because our government has denied him his right to speak and redress the government over these issues, using as their excuse meeting disruption when he inadvertently goes over the meager three minutes which the officials allow citizens in this San Bernardino County to redress government.

Response

Thank you for your comment.

13 (9145)

Comment - EIS001971 / 0002

I spent a portion of autumn, 1999 in the Minnesota State Archives reviewing the record of the second site process with which Minnesota was fiercely engaged from 1983-1987. From the reports, comments and testimony submitted to the federal government (NRC, DOE & Congress) by Minnesota's Nuclear Waste Council and state agency staff, I got an excellent perspective on the interplay of political, technical and strategic factors in the siting process. A number of the critiques and recommendations that Minnesota made during that period could still be applied. Unfortunately, limited time and resources prevent me from utilizing insights from that review. My conscience has been sharpened, however, by reliving the 5-7 years when Minnesota faced, with similar resistance and fears, the prospect that Nevada now faces. During that time, Minnesota reviewed federal reports on primary and secondary containment, site characterization, and transportation. The state grappled with state's rights issues, even submitting an amicus brief on Nevada's suit, and attempted to support standards that Minnesotans knew that they might have to live with. I am well aware of the unresolved issues and inadequacies of the process.

Response

Thank you for your comment.

13 (9180)

Comment - EIS002123 / 0002

And most of my remarks today -- tonight are going to be taken from this article in the Las Vegas Sun dated Sunday, December 5, 1999, so this is very recent.

I don't suppose you can see it, but this is a picture, and you can see that it's highly technical. It says: "Engineers on-duty inside the live control room at the Calvert Cliffs Nuclear Plant in southern Maryland -- southern Maryland, Calvert Cliffs would send its solid waste to Yucca Mountain under a current proposal," and they've titled this called The Day of Reckoning, and I scratched out reckoning and I called it the Day of Infamy.

"Nuke plants running out of space as they wait for Yucca decision" and they start out by telling you how beautiful it is back in -- in Calvert Cliffs County, Maryland that you can -- oh, you can see the green forest and they're awash in red and gold and rust and the white-tailed deer dart into the woods and a bald eagle soars and sea breezes blow. "This beautiful setting seems a strange place to find one of the nastiest substances on earth, but nestled in this former Maryland tobacco farm is the state's only nuclear power plant where two 850 megawatt nuclear reactors generate electricity for 450,000 households and 35 to 40 tons of highly radioactive nuclear waste a year.

"The waste at Calvert Cliffs like any other produced by 103 reactors at 72 plants nationwide spent uranium fuel rods stored in pools of water inside the plant. The waste in a sample of the radioactive material bound for permanent storage Nevada." They've already decided that.

"Under a current proposal, Calvert Cliffs and the rest of the nation's plants want to store their waste in a single site, a geologic repository inside Yucca Mountain.

"The plants are running out of space," said Steven Ungelsbee, spokesman for the Nuclear Energy Institute, the industry's powerful lobbying arm." Get that word "lobbying" in there.

"The day of reckoning is here, and the glimpse inside Calvert Cliffs offers insight into the nuclear industry's campaign to make Nevada a nuclear burial ground." I wonder if they're talking about people. And you know, we hear from our opposition all the time how safe this stuff is. Okay. Can't see this picture, and by the way, I have a lot of these Xeroxed, so anyone that wants to come up get one afterwards, I'll be glad to share them with you.

Response

Thank you for your comment.

13 (9207)

Comment - EIS002140 / 0005

Worked on the coal-fired powerhouse. Talk about environmentally damaging. My God. I mean, they turn off the scrubbers at night so they can go ahead and shoot that stuff into the air and nobody can see it. It's absolutely horrible what coal-fired powerhouses do to the environment.

Response

Thank you for your comment.

13 (9440)

Comment - EIS010129 / 0002

When an airplane crashes it makes the news because it's, you know, a lot of people dying at the same time. But the same amount of people can die in the same day in a bunch of car accidents all around the country. So in some way this Yucca Mountain thing puts all of the problems of the nuclear waste that we all have to face because we're all using electricity, we're all benefiting from this environmental degradation and these problems, this cancer causing horrible stuff, this nuclear radioactive waste, we're all benefiting from that in our use of electricity.

It's a communal problem deal. We need to deal with it. And Yucca is that symbol of putting it all in one place like in an airplane crash versus car accidents or other methods of death that people have devised for themselves. So that is one reason I think that the people have gathered and are trying to do something about it. But we need to continue

regardless of whatever happens to Yucca Mountain, we all need to focus on our lifestyle choices and our responsibility as other people said tonight.

And I'd also like to make the statement that the process needs to continue, that the freedom of speech forum needs to continue and it needs to be expanding to a real process where people have a say so in what we're going to do with our communal problem of nuclear waste.

And so this also is all sort of a warning, my statement, because we live in the most powerful empire that the world has ever known, having so much control over the rest of the planet. And this empire, the United States, has also been -- it doesn't just exercise its power and control through the threat of nuclear weapons and whatever else it can come up with and maintain the policy of our economy being God in this country.

But the United States, in addition to controlling the rest of the planet and having that influence, it also has done a masterful job of keeping us people in the United States from finding true fulfillment and love, because it behooves the interest of those who are in charge to control and to dominate the rest of the planet. And it behooves them to confuse the rest of us in the United States and make sure that this process does not go anywhere in terms of the people's voice having a say so in what we do with our communal problem of nuclear waste.

Response

Thank you for your comment.

13 (9827)

Comment - EIS001888 / 0404

[Clark County summary of comments it has received from the public.]

Environmental justice with regard to transportation must be considered in the NTS [Nevada Test Site] EIS.

Response

This comment is one of many the Clark County government collected over several years. The date of this comment, May 3, 1996, and its subject matter suggest that it was intended as a comment on the *Draft Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada*. DOE published the Final EIS on the Test Site in August 1996 (DIRS 101811-DOE 1996).

DOE is committed to the principles expressed in Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations." The Department believes that its treatment of environmental justice in this Yucca Mountain EIS, in the Nevada Test Site EIS, and in all of its documents prepared under the National Environmental Policy Act adheres to these principles and is fair and appropriate.

13 (10660)

Comment - EIS002102 / 0004

In only 50 years of the nuclear age, nuclear waste has leaked out of its containment at the Hanford Nuclear Reservation in the State of Washington and is leaking into the Columbia River. Strontium-90 has been found where salmon spawn, and the prevailing current will make [its] way down the Columbia River and down the West Coast of the U.S. coast, high-level nuclear waste. Radioactive environmental contamination will threaten the health and gene pool of thousands of future generations and Dr. Jay Gould's book, "The Enemy Within" -- he cites breast cancer rates were going down prior to 1945. Then with the first atom bomb explosion, breast cancer rates went up yearly.

Response

DOE acknowledges that past activities at its sites produced environmental contamination, and understands the concern that continued or future activities at those sites could result in harmful health effects in the public. Although the scope of this EIS is limited to an analysis of the construction, operation and monitoring, and eventual closure of a geologic repository at Yucca Mountain, the issue of radiological exposure and its relationship to cancer and other health effects is pertinent and important.

The Environmental Protection Agency and Nuclear Regulatory Commission have established dose limits to ensure there would be no impacts to public health and safety that would pose an unacceptable societal risk. No containment, natural or engineered, can be guaranteed indefinitely. Some radionuclides or potentially toxic

chemicals could eventually enter the environment outside the repository. However, long-term performance assessment (modeling) analysis shows that the combination of the natural barriers of the site and engineered barriers would keep such a release small enough to pose no serious impact on the health and safety of people or the environment.

The results of this analysis, described in Chapter 5 of the EIS, indicate that impacts for the 10,000-year evaluation period would be low and that health effects would be thousands of times less than natural incidences of health problems in the population. The impacts predicted by the analysis would be much lower than the Environmental Protection Agency or Nuclear Regulatory Commission limits. Appendix I of the EIS, the *Viability Assessment of a Repository at Yucca Mountain* (DIRS 101779-DOE 1998), and supporting documents contain details of the analysis methodology.

13 (10724)

Comment - EIS002170 / 0008

As they say, "humans, we could have been so great...but we suck."

Too bad all of this wasn't thought about before we jumped into this nuclear age. Too bad our species doesn't have foresight and believes itself to be the caretakers of this beautiful planet. We certainly aren't well adapted to the job even if it were ours, which it isn't.

Do something right. I know everyone is thinking of trying to mitigate a bad situation. Think, think before any action is taken.

Response

Thank you for your comment.

13 (10728)

Comment - EIS000123 / 0002

DOE, with the Atomic Energy Commission, the Manhattan Project, when they got rid of the waste over there, they just dumped it over there.

They thought they were doing the proper methods over burial over at that area, just like we think we're properly taking care of the nuclear waste now, but looking back in retrospect, this is out of an article that I wrote some years ago.

"It's been fifty short years since the Manhattan Project was transferred to the Suburban Forest Reserve District and thirty years since its reactors, the related waste were buried.

"Scientists haven't much knowledge about what lies below the earth. Records of buried waste are grossly incomplete and standards about what is considered dangerous have changed dramatically since then.

"Ironically scientists know so little about how our nuclear pioneers lived and worked here that they might as well have been digging into Inca ruins, not debris from a nuclear age library."

Response

DOE recognizes that as science and engineering advance, better techniques and designs evolve. If there was a decision to implement the Yucca Mountain Repository, the design would incorporate the best science and engineering available, and would be in compliance with Nuclear Regulatory Commission and other applicable requirements. DOE would monitor the repository performance for at least 50 years after emplacement of the spent nuclear fuel and high-level radioactive waste to detect any anomalies.

13 (10777)

Comment - EIS000250 / 0011

And it is also the case that the nuclear industry is one of the most hugely subsidized industries in the history of the world in an economy that is supposed to be based on free market principles. It is really an insult to the people of this country that the industry receives the degree of subsidies that it does.

Response

Ratepayers and utilities are paying the cost for the disposal of commercial spent nuclear fuel, not the Federal Government. Commercial utilities pay a fee of 1 mil (one tenth of 1 cent) per kilowatt-hour of electricity generated by nuclear energy to cover disposal costs for commercial spent nuclear fuel. The scope of this EIS is to analyze the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste.

13 (10920)

Comment - EIS000244 / 0005

The impressive thing to me about, and I have seen films of this although I have never been in any of the demonstrations, is to see how powerfully strong these casks or storage containers are that they have been subject to train accidents and earthquakes and highway accidents and derailments, fire, et cetera, and puncture tests, and it seems like they pass all these tests very, very well. They really are very, very stout.

Response

As noted in this comment, casks for the transportation of spent nuclear fuel and high-level radioactive waste would be extremely robust and would be a major factor in ensuring the safety of the transportation of these materials. As discussed in Section J.1.4.2.1 of the EIS, nearly 100 percent of rail and truck accidents under the Proposed Action would not result in any release of radioactive material. Cask specifications and the stringent tests required to demonstrate that they meet these specifications are at 10 CFR Part 71. In addition to the testing requirements to demonstrate that the casks can withstand normal conditions of transport (10 CFR 71.71), there are even more rigorous requirements for testing (10 CFR 71.73) to demonstrate that the casks can withstand hypothetical accident conditions. Tests for normal conditions of transport subject the cask to heat, cold, reduced and increased external temperature, vibration, water spray, free drop, corner drop, compression, and penetration. Tests for hypothetical accident conditions include free drop (from a greater height than the normal condition test), crush, puncture, thermal (fire), and immersion.

13 (10946)

Comment - EIS000467 / 0008

As far as the necessity for the environment and jobs that nuclear power provides, nuclear energy industry ads are being challenged for being inaccurate in the newspapers and on the radio claiming to be emission free.

In the Great Lakes alone there are emissions emitted into the Great Lakes, uranium mining in the Great Lakes all of which has contributed to a growing inventory of radionuclides in the Great Lakes. All stages of the nuclear fuel chain are involved in this as well.

Response

Thank you for your comment.

13 (10958)

Comment - EIS001424 / 0003

The jobless/unemployment rate in the region of Southern Ohio (and Paducah, Ky.) is going to increase. About 22 percent of USEC's (United States Enrichment Corporation) workforce is scheduled for lay-off. USEC/DOE Portsmouth Gaseous Diffusion Plant located in Pike County of Ohio is the second largest employer in its congressional district. USEC/DOE Paducah Gaseous Diffusion Plant, Paducah, Ky. is the largest single employer in its congressional district. President of the Paper, Allied-Industrial, Chemical and Atomic Workers representing workers at Piketon, Ohio is quoted as saying:

'We will attempt to find transition work with the Department of Energy and seek an enhanced benefit package' for the people scheduled to lose their jobs beginning In July. ("USEC To Lay Off 850 Workers in Ohio, Kentucky," THE LEDGER INDEPENDENT, 4/4/00, A-4.)

What "transition" work is to be available from the Department of Energy has not yet been made public within the region. One hopes for clean-up funds for both Portsmouth and Paducah which employs union workers--rather than fund more studies and surveys! DOE Yucca Mountain must consider agency regulatory obligation to determine the suitability of the HLRW "permanent" repository. Privatizing the functions of former DOE sites--and DOE

functions--appears to create swift changes in circumstances (i.e., social, economic, and technical regional benefits) in a global, competitive marketplace. International "understandings" and cooperative efforts appear to be subject to bottom line corporate profits and losses.

Bethesda, Md. based USEC was a federal agency set up to enrich uranium for commercial nuclear plants. It was privatized in 1998 to better compete in a global marketplace. Since being taken public in 1998, the company's stock price has fallen from \$14.25 to \$5.87 in trading Thursday. USEC officials say while the company is profitable, it is losing money on the Russian contract. The deal was set up by the U.S. government to keep Soviet-era warhead uranium away from rogue nations and terrorists. USEC has bought the uranium equivalent to 3,000 warheads. [The Ledger-Independent, 4/4/00, pg. A-4.]

Response

This EIS analyzes potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, as well as the No-Action Alternative. Comments related to the Portsmouth and Paducah Gaseous Diffusion Plants are outside the scope of this EIS. However, DOE shares the commenter's concerns about continued employment and the economic health of communities surrounding former DOE sites. To that end, DOE established its Office of Worker and Community Transition that (1) establishes policy and provides funding for contractor work force restructuring activities; (2) develops policy for contractor labor relations, oversees the collective bargaining process, and assists field organizations in labor/management relations; (3) establishes policy for community transition and allocates funding to mitigate economic impacts; (4) assists field organizations reduce the costs of maintaining the DOE infrastructure; and (5) provides information and opportunities for participation in the decisionmaking process affecting the contractor work force and adjacent communities.

Developing and operating the proposed repository at Yucca Mountain would increase jobs in the region of influence. Section 4.1.6 of this EIS describes potential socioeconomic impacts from performance confirmation, construction, operation and monitoring, and closure activities.

13 (11056)

Comment - EIS000475 / 0011

According to LOW-LEVEL RADIOACTIVE WASTES, STATES ARE NOT DEVELOPING DISPOSAL FACILITIES, GAO/RCED-99-238 no disposal facility for commercially generated low-level radioactive waste has been sited in the past 18 years despite the "compact" regional system and \$600,000.00 spent. Common "obstacles and impediments" in the siting process include:

...the controversial nature of nuclear waste disposal, which often manifests itself in the form of skepticism about and/or opposition to disposal facilities by members of the public and political leaders at all levels of government, Ref.: LOW-LEVEL RADIOACTIVE WASTES, GAO/RCED-99-238, Sept. 99, page 5.

Opening the LLRW market to private industry could result in construction of operating facilities which would meet the needs of the commercial LLRW generators.

Response

Thank you for your comment. This EIS analyzes a Proposed Action to construct, operate and monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, as well as the No-Action Alternative.

13 (11083)

Comment - EIS000309 / 0001

In other words, you work with the life giving natural resources rather than with life taking manmade resources. And if you never can catch up to the guide to tell him yourself and if the assistants are mostly unresponsive, you will just need to stop following them and work instead with the people around you to find a new direction in the light.

Response

Thank you for your comment.

13 (11149)

Comment - EIS000320 / 0001

I remember World War II, where we had about four to six million people killed. And for us who were in that war, when we looked at the atomic bomb, we thought, "At least the war's going to be ended. Hurrah, you know, we're going to save lives." That's one factor. The other factor is that I look at all the benefits that come from nuclear radiation. The woman talked about a small child that died from an inoperable cancer. I had a relative and two friends who were cured of cancer using irradiation. Approximately 3,000 people are saved each year treating cancer with radiation.

How many gas and chemical containers go down the railroad tracks that could be just as detrimental or more detrimental than radiation?

We keep talking about the potential accidents that could possibly happen if a cask should be ruptured. And yet we kill about 56,000 people per year in the United States with cars. Why don't we outlaw cars? That's a given, that's a proven fact: every year we kill 55,000. But we may kill some people in a nuclear incident? I have a hard time comprehending that.

Response

Thank you for your comment and recognition that the risk of a potential accident from transporting spent nuclear fuel is extremely low.

13 (11457)

Comment - EIS010080 / 0005

They [nuclear-energy producers] sued the DOE and won in the Supreme Court and now they're suing the EPA. The DOE and the EPA are you and me again! These same energy producers are holding our economy and us hostage. They could be manipulating power production and pipeline access to create an artificial shortage. Why are their profits doubling and tripling?

Response

Private commercial utilities and their ratepayers have paid approximately \$9.8 billion in the Nuclear Waste Fund to pay for the development of a repository for the disposal of spent nuclear fuel and high-level radioactive waste. The Nuclear Waste Policy Act of 1982 specifies that the Federal Government is responsible for providing for the permanent disposal of spent nuclear fuel and high-level radioactive waste, and that the costs of this disposal should be the responsibility of the generators and owners of spent nuclear fuel and high-level radioactive waste. Commercial utilities pay a fee of 1 mil (one-tenth of 1 cent) per kilowatt-hour of electricity generated by nuclear energy to cover disposal costs for commercial spent nuclear fuel.

13 (11458)

Comment - EIS010080 / 0004

Ever since then, generous Congresses have given this industry subsidies and tax breaks, research and development funding and subsidized education. Congress also passed the Price Anderson bill, to limit liability in the event of a nuclear accident, while we have no insurance coverage.

Response

This EIS analyzes the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, as well as the No-Action Alternative. The Price-Anderson Act provides liability coverage for commercial activities operating under a license from the Nuclear Regulatory Commission and DOE activities. The Price-Anderson Act establishes a system of private insurance and Federal indemnification that generally ensures that up to \$9.43 billion is available to compensate for damages suffered by the public from a "nuclear incident," regardless of who causes the damage. The EIS has been revised to include more details about indemnification under the Price-Anderson Act (see Section M.8 of the Final EIS).

13 (11509)

Comment - EIS000454 / 0003

Jobs are very important, but clean, safe, morally acceptable jobs are what's important, not just any job. I very much support union members in their concern for jobs. But not just any job will do. If we get together and demand decent, morally acceptable jobs, maybe there will be enough of us together.

Response

Thank you for your comment.

13 (11735)

Comment - EIS010032 / 0001

We need two nuclear waste repositories with fast breeder reactors for recycling fuel rods, pellets and warhead material. They should be centrally located for closer access by eastern and western nuclear facilities; i.e., in coal mines of Wyoming and Kentucky for example. Coal mines are naturally radioactive. More radioactive heavy metal is released into the environment by burning coal than all the spent fuel rods now in storage. Each coal fired power plant releases 74 pounds of uranium U-235 every year which could be surreptitiously recapture [sic] enough material for two nuclear bombs. We have to get real and inform the public about the facts, soon.

Response

The scope of this EIS is limited to an analysis of the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, as well as the No-Action Alternative. The construction of nuclear waste repositories with fast breeder reactors for recycling fuel rods, pellets, and warhead material are beyond the scope of this EIS.

13 (12298)

Comment - EIS010138 / 0001

I would also request that the Department of Energy, when it does its Yucca Mountain tours, quit referring to the Amargosa area as the Amargosa Desert where nothing lives. 30 million people are fed by the milk that is produced in Amargosa. 25 percent of our state's milk production is produced in Amargosa. It's a vibrant, living community and they deserve better.

Response

Thank you for your comment.

13 (12368)

Comment - EIS010139 / 0004

I do have a good question. I know the S&ER was printed on recycled paper, I thank you for doing that. How much of it was post consumer recycled? There's a question.

Response

The Science and Engineering Report (DIRS 153849-DOE 2001) was printed on paper of at least 20-percent postconsumer recycled content.

13 (12583)

Comment - EIS000815 / 0005

Most of the waste generated at DOE's Hanford, WA site is in a form and configuration that provides reasonable assurances of safe, long-term isolation from the biosphere. The Hanford site is a desert with seven inches of annual rainfall. It is bordered on two sides by the Columbia River and surrounded by tens of thousands of square miles of desert. Physical and chemical tests of soils conducted during the 1950s and 1960s showed that the combination of dryness and ion exchange capacity of the soils would preclude significant transport of intensely radioactive materials until after full decay. Moreover, attempts to recover wastes from soil and old tanks would result in needless radiation exposure to workers, and compromise the integrity of stored wastes. Finally, although small amounts of radioactivity might move with ground water into the Columbia River, which flows alongside the Hanford site, the amounts would be much less than those released from routine operations during the 1950s and 1960s. These releases were monitored, and there was no indication of adverse consequences to humans or other life forms.

Operations to remove wastes from the soil and waste tanks at Hanford should be discontinued, except where there is evidence of danger. However, continuing surveillance should be maintained, in connection with other nuclear activities for the benefit of humans.

Response

The Final Environmental Impact Statement for the Tank Waste Remediation System (DIRS 103214-DOE 1996) evaluates the management of DOE Hanford Site wastes in soils and tanks. The purpose of this EIS is to provide information on potential environmental impacts that could result from a Proposed Action to construct, operate and monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste at the Yucca Mountain site.

13 (12874)

Comment - EIS010297 / 0001

I would like to have my patent considered for the Yucca Mountain Project, for the storage and disposal [disposal] of your low level and high level Nuclear Waste, toxic chemicals and/or spent fuel. I also feel that to proceed with a full patented device, rather than a patent pending device, is the way that I would like to proceed. This device I believe will solve most of your problems at Yucca Mountain.

Response

Thank you for your comment. The scope of this EIS is limited to an analysis of the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive was at Yucca Mountain, and the No-Action Alternative. The commenter can contact the United States Patent and Trademark Office for information at http://www.uspto.gov/ or contact them by telephone at 1-800-786-9199 or 703-308-4357.

13 (13123)

Comment - EIS010298 / 0010

We need the Department of Energy to develop renewable, efficient, clean electrical power systems such as hydrogen fuel cells, and solar and wind generators.

Response

DOE is committed to the development and responsible use of all types of energy, including renewable energy sources such as geothermal, wind, solar, hydrogen, biomass, and hydropower. DOE's Office of Energy Efficiency and Renewable Energy is responsible for leading the Nation's efforts in the study of renewable energy sources. For information on the Office's activities, please visit its web site at http://www.eren.doe.gov, or write to U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, 1000 Independence Ave., S.W., Washington, DC 28585.

13 (13131)

Comment - EIS010236 / 0005

The electric power industry should make way for truly clean ways of generating electricity - solar, wind, hydrogen and hydrogen fuel cells. The longer nuclear and fossil fuel generators are subsidized by the federal government, the longer these great new technologies will be delayed.

Response

Ratepayers and utilities are paying the cost for the disposal of commercial spent nuclear fuel, not the Federal Government. Commercial utilities pay a fee of 1 mil (one-tenth of 1 cent) per kilowatt-hour of electricity generated by nuclear energy to cover disposal costs for commercial spent nuclear fuel. The Federal Government pays for waste generated and owned by the United States from taxpayer revenues as appropriated by Congress. The scope of this EIS is to analyze the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste.

13 (13200)

Comment - EIS010246 / 0010

The SDEIS reveals that Yucca Mountain would be the world's first solar and wind powered atomic waste dump. This begs the question: couldn't renewable energy be used to generate electricity in the first place, so that nuclear power can be phased out and no more high-level nuclear waste generated?

Response

The scope of this EIS is limited to an analysis of the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, and the No-Action Alternative. DOE is committed to the development and responsible use of all types of energy, including renewable energy sources such as geothermal, wind, solar, hydrogen, biomass, and hydropower. DOE's Office of Energy Efficiency and Renewable Energy is responsible for leading the Nation's efforts in the study of renewable energy sources. For information on the Office's activities, please visit its web site at http://www.eren.doe.gov, or write to U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, 1000 Independence Ave., S.W., Washington, DC 28585.

13 (13332)

Comment - EIS010129 / 0005

So there's also an opportunity that we have because despite the fact that we're in this most powerful empire in the history of the world, there's a weakness and that is that the United States still allows freedom of speech. And so if we don't exercise that and start listening to each other and go beyond just the freedom of speech and into dialogue and into further action based on the wisdom that we can come up with communally, then we can do a good job of taking care of each other despite the powers that be in the United States.

Response

Thank you for your comment.

13 (13340)

Comment - EIS010161 / 0002

I also forgot to mention at the DOE hearings in '93 in Concord I told of having heard of missing plutonium at the Concord Naval Weapons Station, which occurred at the time of the murder of Lieutenant Commander Peter Herlin in the aftermath of the Brian Wilson maining where he lost his legs to a weapon train there. It was an unsolved murder.

My point here about that is the fact that none of my comments appeared in the environmental impact report on the use of Concord weapons station as a trans shipment point. And not so much the theory, the rumor, because I just presented it, having heard it from three different military sources, but the fact that my comments were not in that environmental impact report, not even as this lunatic thinks that these soldiers told him when the lieutenant commander was murdered that there was also missing plutonium from the base.

Response

The scope of this EIS is limited to an analysis of the potential environmental impacts of the Proposed Action to construct, operate and monitor, and eventually close a geologic repository for disposal of spent nuclear fuel and high-level radioactive waste at Yucca Mountain, and the No-Action Alternative. Other issues identified by the commenter are beyond the scope of this EIS.

REFERENCES

156756 Cheney 2001 Cheney, D. 2001. *National Energy Policy*. Washington, D.C.: U.S. Government Printing Office.